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XVI. New Lepidoptera from Dutch New Guinea. By J. J. JOICEY, F.L.S., F.Z.S., F.E.S., A. NOAKES, F.E.S., and G. TALBOT, F.E.S.

[Read May 5th, 1915.]

PLATES LV-LXII.

THE forms herein described were all taken by Messrs. A., C., and F. Pratt, and, except where otherwise stated, were collected at the Angi Lakes, Arfak Mountains, 6000 feet, January to March 1914. The types are in the collection of Joicey.

Our thanks are due to Lord Rothschild, Dr. K. Jordan, and G. T. Bethune-Baker, Esq., for kind help and the opportunity of comparing specimens in their collections. We are also indebted to Sir G. F. Hampson for useful help with the Heterocera.

Forty-four forms are described as new in the present paper, and five of these represent the $\bigcirc \bigcirc \bigcirc$ of forms already described from \eth specimens.

RHOPALOCERA.

(By Joicey and Noakes.)

PAPILIONIDAE.

1. Papilio (Troides) tithonus prominens, subsp. nov.

(Plate LV, fig. 1, 3; Plate LVI, fig. 1, 3.)

We are not sure, in the absence of more material, whether the \mathcal{J} described below is associated with the \mathcal{Q} upon which we base the subspecies.

 \bigcirc . Cell-spot of forewing rounded, and all spots suffused with dark scaling. Hindwing with a small cell-spot as in *waigeuensis*, Roths. Abdomen with segments mostly black laterally and fringed with black hair ventrally to a greater extent than in other forms of the species.

3. Forewing above with costa and apex more broadly black and costal patch reduced; in cellule 8 there is only a nebulous streak.

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The outer edge of the stripe in 7 is about level with that in 6 giving the costal patch a more wedge-like than oval shape. In cellule 9 are only a few scattered scales. The median patch is produced anteriorly to above vein 5 as a narrow spur.

1 3 from Angi Lakes, 1 \bigcirc from Momi, 4000 feet, February.

2. Papilio (Troides) tithonus misresiana, subsp. nov.*

(Plate LVII, fig. 1.)

 φ . Forewing with cell-spot smaller than in the type-form, second discal spot larger, apical spots a little larger. Hindwing with cell-spot small as in *waigeuensis*, Roths., marginal black broader especially in cellules 4 and 5.

 $3 \heartsuit \image$ from Mount Misresi, 3000 feet, Arfak Mountains, Jan. 1910, A., C., and F. Pratt. $1 \heartsuit$ in the Tring Museum bearing same locality.

3. Papilio (Troides) paradisea arfakensis, subsp. nov.

(Plate LVIII, fig. 1, 3.)

This well-defined local race is particularly interesting as exhibiting in the Q a likeness to *meridionalis*, Roths.

 \mathcal{S} . Upperside.—Forewing with costa more broadly black and golden patch therefore narrower than in the type form. The interspace between veins 9 and 10 is sparsely scaled with green. The costa is thinly scaled with green to about half length of cell. The median patch is distally rounded so that the black margin is wider near the outer angle than it is in the typical form. Hindwing with yellow extending beyond cell in cellules 3 and 4 and to a greater extent in the co-type. The black margin is somewhat broader between veins 5 and 7. The tails are shorter and more blunt.

Underside of forewing with costal black entering cell, extending along its upper margin and joined to a black bar crossing middle discocellular between veins 5 and 6 and projecting beyond cell for a third of its length; this bar cuts off a small green patch at upper angle of cell. The apical black is extended between veins 7 and 8. The inner margin is black except for a small patch of green at the middle. Hindwing as above. Legs entirely black.

^{*} The \mathcal{Q} figured by Kenrick, Trans. Ent. Soc., 1911, Pl. IV, is evidently this form, whilst the \mathcal{J} on Pl. III is probably also referable to *misresiana*.

The co-type has the forewing markings a greenish-blue, the costal patch being slightly tinged with gold.

2. Forewing with cell-spot proximally rounded, discal spots well defined. Hindwing with discal band filling outer two-fifths of cell and extending into cellule 6 as in some specimens of meridionalis, though to a greater extent. The black spot in cellule 6 is well defined; the spot at inner margin touches vein 2 and is confluent with the black ground-colour. The discal area of the band is white as in meridionalis, though more or less clouded with dark scales over a short area proximally of the spots.

The abdomen below has the segments hairy at their apices.

2 3 3 and 4 \bigcirc \bigcirc were obtained.

4. Papilio albertisi, Oberth. \mathcal{Q} .

Papilio albertisi, Ob., Et. d'Ent., 4, p. 41.

Resembles the \mathcal{J} above. Below it is paler, specially the apical band of the forewing and the distal margin of hindwing. The yellowish bordering to the submarginal spots is more developed.

A single specimen. There is also a specimen in the Adams Coll. in the British Museum, which was also obtained by Mr. Pratt in Dutch New Guinea.

PIERIDAE.

5. Leuciacria acuta, R. and J. Q.

(Plate LV, fig. 2.)

J. L. acuta, R. and J., Novit. Zool., 1905, p. 463; Seitz, Macrol., 9, p. 121, pl. 73a.

Q. Upperside dirty white. Forewing with outer margin, costa, and base brownish-black. Outer marginal border broad and narrowing posteriorly, its edge incurved but projecting in cellule 3 to half length of cellule, rounded in cellule 1b. A discocellular spot, brownish-black and oval, joined to the costal black. Hindwing with some black and yellow dusting at base and some black dusting at apex.

Underside darker than in \mathcal{J} . Forewing with basal half of cell purplish, a discocellular spot as above. A subapical brownishblack band, broadest on costa and reaching vein 4, followed by a spot in 3 and a smaller one in 2. Apex lilac. Hindwing with 3 faint submarginal spots in 3–5.

Two specimens obtained, also a long series of $\mathcal{J}\mathcal{J}$.

6. Delias elongatus, Kenr. Q.

(Plate LVI, fig. 2.)

D. elongatus, Kenrick. Trans. Ent. Soc. Lond. 1911, p. 19, pl. iii, fig. 4, 3.

Q. Upperside.—Forewing with spots pale buff. A little whitish scaling in basal half of cell. Hindwing with light area creamcolour, a black spot outside cell and touching it, between veins 4 and 6. Basal half of cell black with a few light scales. Marginal border wider than in δ .

Underside.—Forewing with triangular patch reduced. Hindwing with discal purple area washed out and spot at end of cell enlarged.

Length of forewing : 31 mm.

 $3 \not\subset J$ and $3 \not\subseteq Q$ of this species were obtained.

7. Delias pratti, Kenr. Q.

D. pratti, Kenrick, Ann. and Mag. Nat. Hist., Ser. 8, vol. 4, 1909, p. 177, pl. vi, fig. 2, ♂.

The \mathcal{Q} does not differ from the \mathcal{J} except in having slightly rounded wings.

Several specimens obtained, also a long series of $\mathcal{J}\mathcal{J}$.

8. Delias castaneus, Kenr. Pupa.

D. castaneus, Kenr., Ann. and Mag., Ser. 8, vol. 4, 1909, p. 181, pl. vii, fig. 3.

The pupa case here described was found on some sort of mountain grass, to which it is still attached. The insect emerged at 3.30 p.m. on Feb. 17, 1914.

Colour pale brown. Head bearing a forked protuberance, the two curved ends of the fork and the pedicel below black. Two short black tubercles at base of head. A dorsal row of black spines on somites 2–7. Two short black lateral spines on the first abdominal somite, 2 lateral black spines on the second, and 4 on the third somite.

DANAIDAE.

9. Danaida weiskei thalassina, subsp. nov.

(Plate LV, fig. 3, 3, fig. 4, 9.)

6. Upperside.—Forewing with costal streak obsolete, spot near end of cell with its long axis directed basally, discal spot in cellule 2

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smaller than in *weiskei*, patch below cell larger and produced basally and distally with lower edge touching submedian, a streak below submedian shorter than patch above it. The post-discal spot in 2 stands midway between discal spot and margin. Three submarginal dots in cellules 3, 4, and 6. Hindwing with the greenish-white area extended to extreme base and patches round cell enlarged, especially below cell, so that the outer edge of this area is nearly regular.

Underside similar to above. Forewing with costal and streaks beyond cell more distinct. Inner marginal streak extended to near outer angle. Hindwing with reduced light area, post-cellular patches separated and absent in cellules 2 and 3.

Q. Upperside of forewing similar to \mathcal{J} , but markings slightly enlarged. Hindwing with greenish-white area extended far beyond cell leaving a black margin 3 mm, wide which slightly invades the light area on the veins. Some marginal dots from cellules 3 to anal angle.

Underside similar to above. Hindwing with light basal area reduced, the post-cellular patches being invaded by the groundcolour. A series of rounded submarginal spots, one each in cellules 6-4 and a pair in each of cellules 2 and 3; another spot behind vein 2. A series of marginal dots in pairs between the veins, those in cellules 5 and 6 being enlarged longitudinally.

A series of 6 33 and 2 99 obtained.

10. Danaida melusine oetakwensis, subsp. nov.

 $\varsigma \ Q$. Forewing with subapical patches larger, especially the spot in cellule 4, but not so large as in *meeki*, Gr.-Sm.; the patches in 5 and 6 converge more proximally than in the typical form. Hindwing with more brown at the base, the costal stripe being much shortened, though in one specimen in the Tring Museum this stripe is not abbreviated. The post-cellular spots are closer together and are larger in cellules 2 and 3 than in the type-form. The spot in 6 is much reduced.

Snow Mountains, near Oetakwa River, up to 3500 feet. 3 $\mathcal{J}\mathcal{J}$, 3 $\mathcal{Q}\mathcal{Q}$ Coll. Joicey, also in Coll. Rothschild. Specimens in Tring Museum from Upper Aroa River also seem to agree with this form.

11. Danaida melusine grosesmithi, subsp. nov.

(Plate LVI, fig. 3, ♂, fig. 4, ♀.)

Differs from the typical form in reduced markings on both wings.

 \mathcal{S} . Forewing: median patches not touching cell and much shorter than in *melusine*. The lower median patch composed of two confluent spots, smaller than the upper patch. Subapical spots reduced, the one in cellule 6 only half the length of spot in 5. Hindwing with reduced costal patch, discal patch reduced distally. Veins of cell brown, being scaled with white in both *melusine* and *meeki*. Spot in cellule 6 absent. Three white submarginal apical spots.

Underside with a small spot at base of cellule 8, well marked in the Q. This spot is absent in all other forms of *melusine*.

Q. Resembles the 3° but markings more extended and spots larger. Hindwing with a submarginal row of 5 spots in 2-6.

3. Mount Misresi, Arfak Mountains, 3000 feet, Jan. 1910, A., C., and F. Pratt. \heartsuit , Angi Lakes, Jan.-Feb. The only specimens of this rather specialised form.

AMATHUSIIDAE.

12. Morphopsis ula brunnifascia, subsp. nov.

(Plate LX, fig. 1.)

 \mathcal{J} . The band on the forewing is much narrower than in *ula*, R. and J., and is yellowish-brown except for a creamy oblong spot on the costa. The band is slightly separated from the submarginal lines, and the part lying in cellule 2 is larger than it is in *ula*. The hindwing is darker, the eyespot has no outer ring and the blue iris is somewhat reduced. On the *underside* the blind ocelli in 3 and 4 are confluent and their dark centres are lunate. In a specimen taken in March the underside is much lighter than in *ula*, and the forewing shows a well-marked creamy band below.

Two specimens were obtained. The collector notes that it flies near the ground.

SATYRIDAE.

13. Platypthima pedaloidina, sp. nov.

(Plate LVII, fig. 2, ♂, fig. 3, ♀.)

Near to decolor, Jord.

 \Im . Upperside of forewing with a pale discal patch from inner margin into the cell, narrowing anteriorly. Beyond cell a pale stripe from costa to vein 2, where it ends in a point and touches the suffused outer edge of the discal patch. Hindwing with a pale discal band from costa to vein 2, constricted at vein 5 and irregularly defined proximally. Underside of forewing with inner-marginal yellowish-white area entering the cell between veins 2 and 3. A well-defined lightercoloured band not touching cell, from costa to vein 2 where it touches the submedian patch. Two very small apical ocelli consisting of an indistinct black pupil with a white iris, in cellules 4 and 5. At the apex some reddish-brown scaling. The submarginal bluish-grey line is more strongly crenulate than in *decolor*. Hindwing with a small triangular white spot in centre of cell. The white discal band is proximally dentate and only extends to the cell, continuing as a zigzag line to middle of 1c. A red-brown spot, faintly edged with white proximally, fills end of cell. The base and inner margin more thickly sprinkled with greyish scales than in *decolor*; ocelli all smaller and including one in cellule 5.

 \bigcirc . Similar to \circlearrowleft with more rounded wings and paler markings above; the two anal ocelli on hindwing more distinct. Below, the costal band on hindwing is narrower and the spot in 2 is larger.

Length of forewing : 320 mm., 921.5 mm.

A series of $\mathcal{J}\mathcal{J}$ and $2\mathcal{Q}\mathcal{Q}$.

14. Harsiësis hygea chalybe, subsp. nov.

5. Upperside similar to noctula, Fruh., but with blackish-brown margins which are wider on hindwing and merge into the bluegrey colour. Underside with distal half of forewing paler and no band as in noctula. The chain of ocelli on hindwing has a lighter ground-colour and stops at vein 2.

 \bigcirc . Upperside much paler in colour, especially the outer half of hindwing. Underside of forewing shows a better defined dark basal area against a paler apical half. Hindwing below scarcely paler than in the \eth .

1 3. Angi Lakes; 1 3. Coast near Manokwari, Jan.-Feb., 1914.

Coast District, Geelvink Bay, Dutch New Guinea, Nov. 1914, $1 \triangleleft, 2 \triangleleft 2$.

15. Mycalesis barbara fulvo-oculatus, subsp. nov.

(Plate LVIII, fig. 2.)

 \mathcal{S} . Wings more rounded than in typical form. Upperside.—Forewing with narrower band especially in cellules 2 and 3, median ocellus faintly ringed with yellowish. Hindwing with band widened distally and extending almost to first submedian; some yellowish scaling on inner margin. The two anal ocelli well developed and

ringed with fulvous. The general ground-colour paler than in typical *barbara* and bands also paler.

Underside of forewing with marginal line almost straight, and outer marginal area lighter. Hindwing with proximal edge of white band irregular.

Length of forewing: 26 mm.; M. barbara, 24 mm.

1 3. Coast near Manokwari, Jan.-Feb. 1914.

16. Mycalesis nerida angiana, subsp. nov.

(Plate LVIII, fig. 3.)

9. Upperside.—Forewing with the outer edge of the darker basal area very slightly incurved and straight in the lower median space. Submarginal line thinner and space between it and marginal line a little wider than in *elia*. Costal and apical black reduced. On hindwing the marginal and submarginal lines more strongly undulate.

Only one specimen was obtained.

17. Mycalesis lorna fumosus, subsp. nov.

(Plate LVII, fig. 4.)

J. Upperside much darker than lorna, Sm., blackish-brown, rings of ocelli indistinct.

Underside deep purplish-brown, the lighter distal part widened proximally of the ocelli.

Only one specimen obtained.

ERYCINIDAE.

18. Abisara tessei, sp. nov.

(Plate LVIII, fig. 4, 3.)

 \mathcal{S} . Upperside similar in appearance to weiskei, Roths. Forewing crossed at its centre by a light-brown band about 2 mm. wide which consists of a short costal band reaching vein 4, touching it and the veins a square spot in 3 placed distally, and a narrow spot in 2 between veins 2 and 3 and reaching to within 2 mm. of margin. Base dark chestnut-brown, filling the cell to vein 3, and base of cellule 2 and half of 1, extending along lower submedian to almost the outer angle. A well-defined subapical white spot in 6, and traces of white dots in 7 and 8. Hindwing chestnut-brown, costal area broadly black and distally almost touching vein 4. A white patch of scales at base of costa. Three black submarginal spots, the largest in 3, the first indistinct in 1c. Black marginal spots on veins 2, 3, and 4, the first the largest.

Underside of forewing of burnt umber ground-colour with the band white tinged by the brown showing through from above. A white post-discal line narrowing posteriorly, from near apex straight to vein 3 and continued to 2 by a thin brown line which borders the outer edge of the end spot of the discal band. A white bar crosses the cell between veins 2 and 3. The inner marginal area, extreme base of cell, basal part of 2, and extreme base of 3, paler than rest of wing. Hindwing pale umber with costa, subapical area, and discal spots of same colour as forewing. A spot in cell joined to one across upper end of cell, a double spot beyond cell in 4 and 5, a smaller placed more distal in 3, one below it in 2, one more proximal in 1c, and one adjoining in 1b, a white spot on costa near base. Submarginal black spots in 1c, 2, 3, 4 and 5, those in 2 and 3 being the smaller, in 4 and 5 joined to form an oblong spot; all proximally bordered with white, and outwardly edged with white except the spot in 5. A white spot at anal angle in 1bjoined by a pale streak to the anal spot. The spots in 1b and c, 2and 3, have proximally an ill-defined triangular dark spot. The margin is edged with rufous from the anal angle to vein 6, interrupted on 2, 3, and 4 by a black spot.

Antennae black, tipped with yellowish-brown. Head, thorax, and abdomen pale brown above, white below; frons edged laterally with white. Palpi yellow. Legs brown on outside, yellowish-white inside.

 \bigcirc . Larger, wings more rounded, similar to \eth in appearance. Forewing with a wider discal band. An apical band of 5 small white spots from costa to cellule 4. Hindwing as in \eth , but with an ill-defined black discal spot in 3.

Underside with basal area of forewing paler than in \mathcal{J} and extending to near end of cell, leaving a rounded spot of ground-colour at origin of vein 2. Hindwing with paler ground-colour and spots. The spot in cell and one beyond it are much smaller and with the costal spots stand more free in the ground-colour than in \mathcal{J} . The discal spots in 2 and 3 are enlarged. The forelegs have the tibia and tarsus yellow-brown.

Length of forewing : ♂ 29 mm., ♀ 32 mm.

A series of both sexes.

19. Dicallaneura amabilis angustifascia, subsp. nov. (Plate LIX, fig. 3, ♂, fig. 4, ♀.)

3. Upperside of forewing with a narrower and darker band than in *amabilis*; hindwing tinged with chestnut-brown.

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Underside of forcing similar to upper; hindwing much deeper in colour than in *amabilis* and with no admixture of greyish.

 \bigcirc . Upperside of forewing with band much reduced proximally. Base to beyond end of cell grey-brown shading into fulvous bordering the band, and also in the lower median interspace along inner margin to end of submedian. The yellow part of band is limited posteriorly by vein 2. Hindwing differs from *amabilis* in being fulvous and only a little darker at the base; marginal spot in cellule 4 absent.

Underside of forewing with band as above; the dividing stripe is twice as thick as in *anabilis* \mathcal{Q} ; costal stripe near apex broader. Hindwing paler than in \mathcal{Q} .

A single pair only obtained.

20. Dicallaneura fulvofasciata, sp. nov.

(Plate LX, fig. 2, 3; Plate LIX, fig. 5, 9.)

The \mathcal{Q} , which we place here provisionally, shows close relationship to *leucomelas*, Roths.; but the \mathcal{J} should be similar. It is still doubtful, therefore, whether the sexes described below are one and the same species.

 σ recalls the *amabilis* form. Upperside of forewing with basal part to end of cell and inner marginal area to outer angle dark vandyke-brown, the costa lighter. Adjacent to this a yellowishbrown band 6 mm. broad from costa to submedian fold, where it is 8 mm. broad; rest of wing black. Hindwing vandyke-brown, veins streaked with yellowish-brown beyond cell. A marginal black spot in 5, one in 4 edged outwardly with yellowish-brown, a larger in 3, the tail black fringed with white.

Underside of forewing chestnut-brown. A white discal band from costa to inner margin, widening posteriorly from vein 4 and traversed by a yellowish line from 4 to lower submedian and angled at 2. Across the cell are 2 curved grey streaks. A short white streak at costa just beyond band, and another nearer the apex. A thin curved bluish streak from vein 6 to 3. A submarginal line paler than ground-colour and nearly parallel to margin. A bluish apical dot in 6 and one in 7. Hindwing ground-colour as forewing, but much covered with short grey hair leaving marks as follow :— Two stripes in cell, a band beyond cell from costa to vein 4, a discal band from lower submedian to 2 and continuing to costa in increasingly large spots, the last three marked each with a bluish streak. A marginal spot in 4 with a white streak, a submarginal and a marginal spot in 3, each streaked with white, a submarginal spot

in 2 continued as a streak to submedian, two white anal streaks. Tail with a black spot edged with white distally. A black marginal spot bearing a white dot, in 5.

 \mathcal{Q} resembles *leucomelas* \mathcal{Q} . Upperside of forewing with a brown dot on the discocellular. Hindwing for the greater part white to vein 3 near margin, and to 2 halfway from cell. The remainder, including cell, smoky-brown.

Underside much as in leucomelas. Hindwing with larger white costal patch and from which the spot in 5 is absent; marginal border little paler than the ground-colour.

Head, thorax and abdomen vandyke-brown above, in the 3 pale yellow below, white in the \mathcal{Q} . Palpi white, deeper yellow laterally. Legs black on outside, pale yellow inside. Antennae black, slightly tipped brown.

Length of forewing : 324.5 mm., 923.5 mm.

A series of both sexes.

21. Dicallaneura exiguus, sp. nov.

(Plate LX, fig. 3, 3, fig. 4, 9.)

A smaller form than *fulvofasciata*, but closely allied to it. The \mathcal{Q} shows a trace of a brown stripe in the white band below and in this it differs from *leucomelas* $\varphi \varphi$.

 \mathcal{S} . Upperside of forewing with a shorter band than in fulvofasciata and not reaching costa; part beyond cell narrower, but at vein 2 is 8 mm. wide. Proximal edge of band merged into the basal brown. Hindwing a little paler than in *fulvofasciata*, with a brownish costal suffusion.

Underside with markings lighter and better defined than in the allied form; the brown line within the band is straight and terminates on vein 2. The submarginal line is creamy-white and the costal streak next it is continued as a zigzag line from vein 5 to 4. where it joins the submarginal and encloses a space mostly filled with creamy-white. Hindwing markings much as in the allied form. There is a small greyish-white triangular costal patch at beginning of discal band, and the grey hair does not fill the basal half of cellules 1, 2, 3.

 \mathcal{Q} . Upperside of forewing similar to fulvofasciata \mathcal{Q} . Hindwing with white area reduced and terminating on vein 4; veins 2 and 3 streaked with greyish-white, and two bands of same colour before the margin across interspace 3.

Underside similar to \mathcal{J} . A faint brown streak in the white band. On the hindwing the costal patch is enlarged and is white.

Head, thorax, abdomen, legs and palpi as in *fulvofasciata*. Antennae wholly black.

Length of forewing: 3 19 mm., 9 19 mm.

 $3 \mathcal{J} \mathcal{J}, 6 \mathcal{Q} \mathcal{Q}$ obtained.

LYCAENIDAE.

22. Cyaniris manokwariensis, sp. nov.

(Plate LX, fig. 6.)

5. Upperside bright blue. Forewing with a well-defined outer black marginal border; fringe black except at tornus, where it is white; costa very narrowly black. Hindwing with costa smokyblack, a faint whitish scaling in cellule 6, fringe white.

Underside grey-white with dull black markings. Forewing with a line closing the cell, a submarginal row of linear spots, a marginal row of dots. Hindwing with 4 subbasal spots, one in the cell the larger; a line closing the cell; beyond the cell a linear spot in 7, one below it shifted in, 2 others similarly placed but nearer the margin in 4 and 5, a dot at base of 3, a small spot near base of 2 and below it in 1c a curved mark, a small spot in 1b on inner margin, a marginal series of dots.

Near C. drucei, B.-Baker. Length of forewing: 13 mm.

A series from Angi Lakes and coast near Manokwari.

HESPERIDAE.

23. Telicota fulvomargo, sp. nov.

(Plate LX, fig. 7, J.)

 ${}_{\mathcal{S}} \mathfrak{Q}$. Upperside deep olivaceous-brown with an inner marginal yellowish-brown stripe on forewing extending from base to near the termen where it is produced just above submedian. The stigma on forewing of ${}_{\mathcal{S}}$ extends from base of vein 4 to the submedian just proximally of the upper part of the brown patch.

Underside of forewing deep olivaceous brown. A subapical streak of 3 contiguous pale yellowish spots, 2 larger submarginal yellowish spots joined in 4 and 5, a marginal row of 7 white dots. Hindwing with basal two-thirds white and pale yellow leaving a marginal band of ground-colour 5 mm. broad. The basal area is pale yellow on costa, at inner and along outer margin, and in cellule 4 where it projects more than halfway into the marginal area. A spot of the marginal ground-colour at end of cell and lying mostly outside it, another in 1c and touching vein 2, and a small spot at base of 2. A marginal series of 6 yellowish dots.

Head, thorax, and abdomen dark olivaceous-brown above, below

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pale yellow except abdomen which is only so at base. Palpi yellowish white, black at sides. Legs with tarsus and tibia of general ground-colour, rest yellowish. Antennae black, base of club yellow beneath.

Length of forewing: 19 mm.

Only 3 3 3 taken.

HETEROCERA.

(BY JOICEY AND TALBOT.)

ARCTIADAE.

24. Diacrisia holobrunnea, sp. nov.

(Plate LXI, fig. 4.)

Q. Fuscous-brown dotted over with black scaling. Upperside. Forewing with discocellulars black. Beyond the cell a faint curved discal line from costa to inner margin, emphasised by black dots on veins 2–5. A second faint curved line about 2 mm. beyond, darker on costa and ending just perceptibly on vein 2. A submarginal row of dots on the veins. Hindwing paler; cell closed by a well-marked discocellular spot; some submarginal spots which are faint at the apex and well-marked posteriorly.

Underside paler than above. Forewing with a black spot on costa near base, a thin streak on costa at end of cell, a large black subapical costal spot, a small apical spot and two below it. An ill-defined narrow oblique band almost joined to the subcostal spot and ending faintly on vein 2. Hindwing with a streak in the cell, a discocellular spot, a costal streak above it, and submarginal spots better defined than above.

Head, thorax, and legs fuscous-brown. Fore femora reddish at base on inside. Abdomen yellowish above, fuscous below; a black dorsal stripe and two lateral rows of black spots on ventral segments.

Length of forewing : 28.5 mm.

A single example.

25. Diacrisia rubribasis, sp. nov.

(Plate LXI, fig. 1.)

Allied to *pratti*, B.-Baker,* but distinguished at once by the absence of the broad dark stripe on thorax and by having a dorsal stripe on abdomen instead of a row of spots.

* Diacrisia pratti, B.-Baker, Nov. Zool., xi, 1904, p. 412.

Upperside. Forewing buff; 4 black costal spots, one at base, one opposite vein 2, one beyond end of cell, and one before apex; antemedial line dark orange and indistinct, angled outwards at vein 2, where it joins a similarly coloured line connected with an indistinct discocellular spot of dark orange; postmedial dark orange line from the third costal spot, curved outwards to vein 5 and then oblique and terminating on inner margin in 2 black spots which vary in size; a submarginal row of black dots. Hindwing pale orange-yellow to reddish; a large black discocellular spot; a submarginal row of 6 to 9 black spots, the two at anal angle nearer the margin, the spot in cellule 3 the smallest.

Underside. Forewing buff, cell washed with red; a small discocellular spot which is typically a dot at upper angle; costal spots as above, the fourth forming a bar which is narrowly separated from a broad black postmedian stripe continued to 1b; 2 spots on inner margin as above and a series of submarginal dots. Hindwing with spots as on upperside.

Head and thorax buff; mesothorax with a black median line; antennae brown, shaft black; pectus and legs sooty black; abdomen orange-yellow to reddish, paler beneath, a black dorsal stripe, lateral row of black spots.

Length of forewing : 23-25 mm.

7 3 3 from Angi Lakes.

26. Diacrisia ruficosta, sp. nov.

(Plate LXI, fig. 2.)

Allied to meeki, Roths.*

♂. Upperside. General colour pale buff. Forewing with a spot on costa near base, a small spot in cell near upper angle, two pairs of spots near apex, an oblique row of 6 small spots from apex to below vein 6, a dot each on veins 3–5, a pair of dots on submedian at a third from base, a pair of spots, the lower the larger, at twothirds from base, a pair of dots at end of submedian. A faint orange line follows the cell from its upper angle to vein 2 and runs to the first pair of inner marginal spots. A better-defined orange line joins the first pair of spots near apex to the second inner marginal pair; it curves outwardly to vein 4, then inwardly, and bears faint pairs of dots on veins 3, 4 and 6. Hindwing with a square spot on upper discocellulars, a submarginal spot in 5 divided by the veins, a dot in 2, a spot in 1c, a rounded anal spot.

Underside pale buff. Costa of both wings orange. Basal area of forewing and inner margin of hindwing washed with orange.

^{*} Diacrisia meeki, Roths., Nov. Zool., xvii, 1910, p. 144.

Forewing with a black spot closing the cell, a spot on costa near base, a dot below origin of 7, two spots in cellules 6 and 7, small apical spots as on upperside and continued as a row of oblong spots from above 5 to below vein 2, only separated by the veins, two spots on inner margin, a faint spot at tornus. Hindwing as on upperside, and with a small spot in middle of cell.

Head and thorax buff, the latter with a black mesial line and greyish below. Palpi, side of frons, fore coxae on inner side, mid and fore tarsi and tibiae, and hind tarsi black. Mid and fore femora and fore coxae on outside orange. Hind tibiae and femora pale greyish-buff. Abdomen golden-orange above, below as thorax.

Length of forewing : 26 mm.

Two specimens obtained.

27. Diacrisia biagi angiana, subsp. nov. (Plate LXI, fig. 3.)

 ς . Paler than *biagi*, B.-B.,* and with reduced spots. Forewing with spots in cell and on veins 2–5 much reduced, and the pair of small spots below cell at base are absent. A large costal spot before middle of cell, another at end of cell. Spots on hindwing reduced, and especially the one at end of cell.

A series of 11 specimens.

A specimen in the Mus. Brit. from Ninay Valley, Arfak Mountains, is intermediate. The forewing has vestigial costal spots and reduced apical spots.

28. Diacrisia hampsoni, sp. nov.

(Plate LXI, fig. 5.)

3. Ground-colour pale buff. Upperside of forewing with large velvety black patches. Three on the costa all reaching to below the cell and the outer to beyond end of cell; the first two at base are merged together, the third is much larger and is slightly separate. A square-shaped patch before the apex, a smaller one at the apex, a triangular one below it on the outer margin, an oblong marginal spot near tornus, a discal patch in cellule 2. On the inner margin are 4 rounded patches, one subterminal and separate, the others merged together. A spot at extreme base of costa and an orange spot below it. Hindwing with basal and inner-marginal area washed with yellow ochreous. A rounded black marginal spot on first submedian.

Underside of forewing as above, spots not velvety and all separate. Some orange-coloured hair at the base, and inner margin faintly yellowish. Hindwing orange at base, anal spot as above.

^{*} D. biagi, B.-B., Nov. Zool., xv, 1908, p. 190.

Antennae ciliate. Head, palpi, and thorax velvety black. Crown of head, tegulae, and patagia fringed with orange-yellow. Pectus orange. Abdomen yellow-ochreous, more orange below, terminal segment black above. Tarsi and tibiae smoky-black, femora on the outside smoky-black, on inside orange.

Length of forewing: 22 mm.

This is one of the most distinct species of the genus, and belongs to the last section as defined by Hampson, of this somewhat extended genus. Five specimens were obtained.

NOCTUIDAE.

Subfamily HADENINAE.

29. Dasygaster stigma, sp. nov. (Plate LXI, fig. 6.)

This species is nearest *reversa*, Moore, on account of its eiliate antennae, excised termen of hindwing, and elongate elaspers.

 $\circ \Diamond$. Upperside. Forewing pale chocolate-brown; subbasal line indistinct; antemedial line waved and defined on outer edge by darker brown; elaviform and orbicular moderate in size, reniform larger, all defined by darker brown; a dark streak through cell from orbicular, interrupted by reniform, heavily marked from here to postmedial line and continued indistinctly to margin; an indistinct oblique median line from angle of vein 4 to inner margin; postmedial line erenulate and edged distally with pale brown, excurved to vein 4 and then oblique to inner margin; subterminal line indistinct, farthest from margin between veins 5 and 6; a marginal series of lunate black marks between the veins; fringe lighter brown at the veins. Hindwing smoky-brown, lighter at base, outer margin finely edged with black, fringe proximally pale brown on outer margin, dirty-white distally and on inner margin.

Underside. Forewing smoky-black, costa, apex, and outer margin rufous-brown, inner margin greyish; postmedial line distinct, straight, black. Hindwing greyish-buff, costal and apical area rufous-brown, a small black discocellular spot, a curved black postmedial line; outer margin below vein 6 broadly smoky-black.

Head, thorax, and abdomen below brown as the wings; tegulae pale at apices, patagia pale near base; abdomen grey above, anal tuft pale buff; pectus dirty white tinged with purplish-brown; tarsi with segments 2-5 black mixed with brown, apices buff.

Length of forewing : 18-20 mm.

 $3 \stackrel{?}{\triangleleft} 3, 1 \stackrel{?}{\downarrow}$ from Angi Lakes.

Subfamily ACRONYCTINAE.

30. Trachea brunneicosta, sp. nov.

(Plate LXI, fig. 7.)

3 9. Upperside. Forewing with costa and post-medial band pale rufous-brown; subbasal line marked by a dark dot on costa, a greenish spot on median, and a dark streak below submedian; antemedial line double, oblique, incurved in the cell, filled in with green below 1b, and bordered proximally by a greyish-lilac band twice its width; orbicular and reniform of moderate size, green with some brown scaling in centre; postmedial line double, waved, excurved beyond cell, then oblique to inner margin, bordered distally by a greyish-lilac band twice its width; subterminal line dentate, more or less edged with black proximally in cellules 5 and 6; marginal band sap-green and traversed only by a darker band; margin finely edged with black; fringe proximally greenish-yellow, distally smoky-brown; median and basal area below cell and vein 2 green, darker distally of the antemedial line; cell traversed by a black longitudinal streak, which is most heavily marked between end of cell and postmedial line. Hindwing smoky-grey; an indistinct discocellular spot and curved postmedial line; fringe yellowish proximally, dirty-white outwardly.

Underside. Forewing buff; costa and cell from base to a little beyond smoky-black; subterminal line faintly indicated; inner margin towards base clothed with scales giving a metallic greenish reflection in a side-light. Hindwing buff; a well-marked discocellular spot and curved irregular postmedial line; costa narrowly blackish; outer narrow marginal border paler than ground-colour.

Head and thorax reddish-brown mixed with green; abdomen smoky-grey above, paler laterally, tawny beneath; legs reddishbrown, tarsi black and apices of segments buff.

Length of forewing: 19 mm.

1 3, 1 9.

CLAVIPALPA, gen. nov. (Plate LXI, fig. 8a.)

Proboscis fully developed; palpi with second segment reaching to about middle of frons, third segment long, naked, porrect, extremity clavate; frons rounded; eyes large, rounded; antennae of \Im with fascicles of cilia; thorax clothed with hair; pectus clothed with hair; femora fringed with hair; abdomen with dorsal crests on basal segments, and lateral tufts; forewing narrow with a somewhat produced apex, margin crenulate; neuration as in allied genera.

This genus is apparently near to *Data*, Wlk. Type: C. monogramma.

31. Clavipalpa monogramma, sp. nov.

(Plate LXI, fig. 8, 3.)

 \mathcal{F} Q. Upperside. Forewing with deep reddish-brown groundcolour; subbasal line indistinct, marked with grey at costa; antemedial line in triplicate consisting of a pale purplish inner border, a central reddish-brown line, and an outer thin yellow edge, bent outwards at right angles to costa as far as 1b and then bent inwards at right angles to its upper part; orbicular moderate, paler than ground-colour, slightly defined by a thin vellowish edge; reniform indicated by a broad bar across end of cell, defined on inner and outer edges by yellowish and with a purplish streak down its centre; postmedial line in triplicate with an outer pale purplish margin, a central line of ground-colour, and an inner thin yellow line, nearly parallel to outer margin, being more oblique below vein 4; a marginal series of purplish streaks on the veins; fringe smoky-brown; a dark green suffusion in bases of cellules 1b and 1c; distally of postmedial line veins 1b, 3 and 4 defined by lighter red-brown and each traversing a small green triangle next the line; a submarginal series of small vellowish triangular spots which is but slightly indicated in the 2 type; veins proximally of postmedial line more or less defined by pale purplish. Hindwing pale rufous.

Underside pale rufus. Forewing with cell and postmedial line smoky-grey. Hindwing with a large deep brown discocellular spot and a well-marked curved postmedial line.

Head and thorax dark red-brown mixed with grey, lcgs and abdomen rufous, thorax rufus below.

Length of forewing: 18 mm.

1 3, 2 9 9 from Angi Lakes.

Subfamily CATOCALINAE.

 Ulotrichopus longipalpus, sp. nov. (Plate LXI, fig. 9, φ.)

Allied to dinava, B.-B.*

 $\varsigma \mathfrak{Q}$. Upperside of forewing dark purplish-brown mottled with lilac. An interrupted dark line at the base. A dark zigzag line forming a large spot on costa, crosses the cell about midway and ends on the inner margin. A round white spot ringed with black near base of cellule 2, a smaller lilac spot in lower angle of cell faintly connected with one in the upper angle to form the outer edge of a large but

* Ulotrichopus dinava, B.-B., Nov. Zool., xiii, 1906, p. 246.

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indistinct reniform spot. Beyond the cell a white band, welldefined on the costa but for the most part scaled with brownish, eurving outwardly and ending indistinctly on inner margin, being interrupted at vein 2 by the ground-colour. A well-marked darkbrown dentate line edged with white distally runs partly in the white band from the costa and then obliquely to inner margin. The median area between the two lines is scaled with greenish. A submarginal crenulate lilac line from vein 10 to inner margin and bordered distally by some dark and indistinct triangular spots which almost touch the dark inner edges of a marginal row of white dots. Hindwing with a black margin about 6 mm. wide and narrowing to the anal angle. Rest of wing pale yellow, inner margin orange-yellow.

Underside of forewing with a smoky-brown ground-colour, paler at the apex, at base yellowish-white. A cream-coloured square spot at end of cell, a small spot at base of cellule 2, a cream-coloured post-discal band from costa to below vein 2, curved outwardly. Hindwing paler than above.

Head and palpi greyish-brown; second joint of palpus with a dark lateral line, first joint longer than in other species of the genus, measuring 2 mm. Thorax chocolate-brown mixed with grey, and below grey-black. Abdomen orange-yellow above, smoky-brown below, anal tuft black. Legs grey-black.

Length of forewing : 30 mm.

 $\mathcal{J} \mathcal{Q}$. The description is made from the \mathcal{Q} , as the \mathcal{J} specimen is too worn.

LYMANTRIADAE.

Before recording descriptions of the two forms which follow, a preliminary note will be necessary regarding two genera described by Mr. Bethune-Baker in Nov. Zool., vol. xi, 1904.

Pseudodreata, type strigata, B.-B. (♂), p. 371. Cycethra, type aroa, B.-B. (♀), p. 393.

The distinguishing characters given of these genera as exemplified in their types do not differ from the structure found in *Colussa*, Wlk. The $\Im \Im$ of this genus are all remarkable for the absence of a frenulum, though it is present in the $\Im \Im$.

The \mathcal{Q} of the form of *strigata* described hereafter, agrees in its structure with the \mathcal{Q} of a form corresponding to the \mathcal{Q} of *Cycethra aroa*.

In view of these determinations we believe it is necessary to sink both genera under *Colussa*, Wlk. This genus

seems to agree best in structure with the Lymantriadae, and in which family it is placed in the British Museum.

33. Colussa strigata inconstans, subsp. nov.

(Plate LXII, fig. 2, ♂, fig. 3, ♀.)

 \Im . Very similar to *strigata*, B.-B.,* but differs especially in the absence of all costal black from hindwings. *Upperside*. The two cell-spots on forewing are paler than the ground-colour and thinly ringed with black. The post-discal stripe on both wings is not so heavily marked, and the scalloped line next it on both wings is emphasised by black dots on the veins. The pale area proximally of the submarginal line on both wings is suffused with lavender-grey scaling spread thinly over the yellowish ground-colour. Hindwing with costal area pale yellow to vein 5.

Underside pale yellowish sprinkled with black. The second submarginal line on hindwing only indicated by vein dots.

 \bigcirc . Pale yellowish-brown, thinly scaled. Upperside. Forewing dotted over with purplish scales. An indistinct purplish sub-basal line, a second discal line irregularly curved and crossing cell at vein 3. Beyond cell but nearer to it than to margin, a well-defined deep purplish line slightly convex to vein 2 and then straight to the margin. Parallel to this line a row of dark dots on the veins. A narrow marginal border darker than the ground-colour. A dark spot in middle of cell, a larger round one on discocellulars. Hindwing with a discocellular spot at upper angle of cell. A faint curved discal line crossing cell at vein 3; a post-discal heavily marked dark purplish line, becoming ill-defined towards costa; a row of dark vein dots placed nearly half-way to margin and narrowly separated from a marginal border of purplish scaling.

Underside with post-discal lines and vein dots showing through, discocellular spots with a dark ring.

Head, thorax, and abdomen yellowish-brown, antennae and legs dark brown.

Length of forewing: 37 mm.

 $2 \Im \Im$ and $1 \heartsuit$ obtained. The \Im co-type is a much darker specimen.

34. Colussa aroa angiana, subsp. nov.

(Plate LXII, fig. 4.)

Q. Differs especially from *aroa*, B.-B.,[†] in the two transverse lines on hindwing being closer together. General colour pale rufous but the co-type is much redder. Costa and base paler than rest of

^{*} Pseudodreata strigata, B.-B., Nov. Zool., xi, 1904, p. 371.

[†] Cycethra aroa, B.-B., Nov. Zool., vol. xi, 1904, p. 393.

wing. Forewing with a faint dark sub-basal line, more distinct on costa, crossing cell just below vein 2 and in line with this vein, then vertically to inner margin. A second line parallel to it, crossing cell below vein 3. An oval black discocellular spot. Beyond cell an oblique dirty-white line at a $\frac{1}{4}$ from the margin, edged with black distally. A little beyond is a curved row of black vein dots which form the inner border of a pale submarginal band. Hindwing paler costally. A black spot in middle of cell and one at end at upper angle. Post-discal line nearer cell than it is on forewing.

Two specimens obtained.

35. Euproctis pratti albonotata, subsp. nov. (Plate LXI, fig. 10.)

 \mathcal{S} . Differs from pratti, B.-B.,* in the purer white of the submarginal and apical spots on forewing, and the more elongate apical spots, the one on vein 7 being longest. The pointed distal ends of the spots touch the margin. The round spot at end of cell is snow-white, smaller than in the type form, and unlike that it does not extend into cell below vein 3. The veins are more strongly outlined with whitish scaling. Hindwing paler than in *pratti* and the veins whitish at their ends.

Underside paler than in the allied form and white spots well marked. Hindwing with veins whitish.

Length of forewing: 22 mm.

4 33 were obtained.

36. Euproctis seminigra, sp. nov.

(Plate LXI, fig. 11, J.)

 \Im . Upperside. Forewing with grey-white ground-colour. Base black with a convex outer edge. A dark post-discal band from costa to inner margin and not entering cell, proximally and posteriorly diffuse, and in cellules 3 and 4 joined to a darker marginal border. All veins grey-white. Hindwing smoky black; fringe white from anal angle to vein 4.

Underside. Forewing with base and a large apical area smokybrown, traversed by the white veins; remainder grey-white washed proximally with pale yellow. Hindwing as above, veins whitish.

Head, antennae, thorax, pectus, and legs smoky-brown. Patagia fringed with yellowish hair. Abdomen black, anal segment fringed with grey-white hair, anal tuft smoky-brown.

 \Im like the 3, but with post-discal band on forewing better defined. Length of forewing : 3 24 mm., \Im 31 mm.

^{*} Euproctis pratti, B.-B., Nov. Zool., xi, 1904, p. 400.

37. Dasychira angiana, sp. nov. (Plate LXII, fig. 1.)

5. Upperside. Forewing with basal area to end of cell greyishwhite and limited by the fourth of 7 black transverse lines. The first of these is sub-basal; the second crosses cell a little below vein 2; the third near second and almost touching where it crosses cell at vein 2, diverging towards costa and inner margin; the fourth, heavily marked and diffuse posteriorly where it joins third line, crosses end of cell and forms a heavy black costal spot connected with a rounded black discocellular spot which bears a grey lunule; fifth line well-marked and waved, the space between it and preceding line filled in with smoky-brown suffusion, distal edge margined with brown and remaining outer part of wing buff. Sixth line thin, extending to vein 3, and marked by a large spot on costa; submarginal line irregularly dentate. Hindwing yellowish-brown with a faint discocellular spot.

Underside yellowish brown, a black discocellular spot on each wing.

Head, thorax, and pectus grey-white, abdomen yellowish-brown. Sides of palpi and pectus anteriorly smoky-black. Antennae redbrown, shaft grey-white. Legs grey-white.

Length of forewing : 30 mm.

A single specimen only obtained.

38. Lymantria flavoneura, sp. nov.

(Plate LXI, fig. 12, ♂, fig. 13, ♀.

 \therefore Upperside. Forewing with white ground-colour traversed by waved smoky-black lines as follow :—Three at the base formed of disconnected spots, the outer line crossing cell just below vein 2; fourth and fifth lines more heavily marked, the latter lying outside cell and space between it and fourth filled in with smoky-black from costa to vein 2; sixth line heavily marked, interrupted in cellule 5 by ground-colour and continued from vein 2 to tornus as a heavy black bar; space between lines 5 and 6 filled in with paler smoky-black from costa to vein 2. A seventh submarginal line which is broad and straight from costa to vein 6, then thinner and waved to vein 2 by which it is separated from the bar at the tornus. A marginal row of 8 oblong spots between the veins. Lines emphasised on costa which thus bears 6 spots. Costal edge and all veins yellow. Hindwing pale buff, veins darker, a small blackish anal spot.

Underside pale buff. Forewing with costa edged with yellow and bearing a dark spot at base and another at middle. A black discocellular spot lying within the cell. Three small marginal spots in 2, 4 and 7. Hindwing with a black discocellular spot.

Head and thorax yellowish-white above. Antennae brownishblack. Tegulae with a smoky spot at apex, patagia fringed with smoky-black. Abdomen pale buff. Pectus scarlet. Femora scarlet, fore and mid femora fringed with white hair on inner side. Fore tibiae fringed with smoky hair on outside and white hair on inner side, mid and hind tibiae fringed with white hair on inner side.

Q. Upperside. Forewing pale yellowish. Transverse waved black lines as in \mathcal{J} . Second basal line absent, line 4 comparatively less heavily-marked below vein 2 than in J. Veins slightly paler than ground-colour. Hindwing a little paler with a dark anal marginal spot.

Underside paler than above. Hindwing with a black discocellular spot.

Thorax and abdomen pale yellowish, antennae black.

Length of forewing : $325 \text{ mm.}, \text{ } \text{ } 238 \cdot 5 \text{ mm.}$

A series of 16 $\mathcal{Z}\mathcal{Z}$ and 1 \mathcal{Q} .

EUPTEROTIDAE.

39. Eupterote crenulata, sp. nov. (Plate LXII, fig. 5.)

Allied to styx, B.-B., Nov. Zool., xv, 1908, p. 176.

3. Upperside of forewing pale brown entirely suffused with black scaling, more so at costa. A curved black basal line from costa to inner margin; a faint dark band crossing the cell from costa to inner margin, its outer edge crenulate; beyond the cell two dark and faint narrow crenulate discal bands; a heavily-marked waved submarginal black line, separated by the ground-colour from a dark marginal band. Hindwing pale brown with a wide dark marginal area of sparse black scaling. A well-marked dark and waved line crosses the wing from before the apex to inner margin.

Underside of forewing paler than upperside, darker at margin and on costa. A faint black submarginal line from before apex to inner margin, becoming fainter posteriorly. Hindwing darker than above, discal line fainter, and between it and cell two other lines are just perceptible.

Length of forewing : 46 mm.

Two specimens were taken, the second being smaller and paler than the 3 described.

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LASIOMORPHA, gen. nov. (Plate LXII, fig. 6a.)

This genus is allied to *Melanothrix*, Feld., but has a more robust appearance which is similar to some *Lasiocampidae*.

Thorax and abdomen stoutly built. Wings short and broad. Forewing slightly rounded at apex. First subcostal arises well before end of cell opposite vein 2. Third and fourth subcostals and vein 6 at equal distance apart, 6 and 9 arising close together at upper angle of cell. Upper discocellular short, half length of lower ones; middle discocellular curved inward and shorter than the lower. Vein 5 near 6. Hindwing with upper discocellular oblique and longer than the middle, lower one twice length of upper and middle ones. Vein 5 nearer than 7 is to 6. Palpi with first segment conical and porrect.

Type: Lasiomorpha noakesi, Joicey and Talbot.

40. Lasiomorpha noakesi, sp. nov. (Plate LXII, fig. 6.)

 \vec{o} . Ground-colour on both sides deep purplish-brown but pale below. Wings heavily scaled and covered with short hair at base. Forewing with a large hyaline patch which is devoid of scales below but is above sprinkled with scales of the ground-colour. The scales are rather large in the proximal part; they are 4-toothed and their form suggests the calyx of a Labiate plant. The hyaline patch extends from cellule 6 to below submedian without touching inner margin. It is widest in cellule 4 and narrows posteriorly, curving inwardly at the submedian to form a point below it. It is traversed by a dark line parallel to its outer edge which separates a narrow border more thickly scaled than the larger proximal part. There is a small tuft of yellow hair on the middle discocellular. Underside without markings, outer margin paler. Hindwing without markings on both surfaces, inner margin paler below.

Head, antennae, thorax and abdomen of same general groundcolour above. Palpi and outside of fore tibiae and femora paler; rest of legs, thorax and abdomen yellowish-brown below.

Length of forewing : 38 mm.

Two examples.

41. Gunda kebeae flava, subsp. nov.

 δ . Differs from *kebeae*, B.-B.,* in the darker apical part of the forewing, and in having white scaling in the median area and in

^{*} Gunda kebeae, B.-B., Nov. Zool., vol. xi, 1904, p. 370.



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